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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,874	01/09/2004	Hans Joachim Halamoda	7863-80940	6117

42798 7590 04/05/2007  
FITCH, EVEN, TABIN & FLANNERY  
P. O. BOX 18415  
WASHINGTON, DC 20036

EXAMINER
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NGUYEN, PHONG H

ART UNIT	PAPER NUMBER
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3724

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/753,874

Applicant(s)

HALAMODA ET AL.

Examiner

Phong H. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-8 is/are allowed.  
6) ☒ Claim(s) 9-20 is/are rejected.  
7) ☒ Claim(s) 21 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotter (6,516,696 B2) in view of Liander (3,477,317).

Regarding claim 9, Cotter teaches a punching device capable of punching holes on a ceramic substrate comprising: a receiving device, a die having a shaft 34, an operative portion having a first part 28 and a second punching part 26, a stripper opening 93', a drive mechanism (14, 10) and a die guide 40. See Figs. 2-4.

Cotter does not teach the stripper opening having a constant diameter. Liander teaches a stripper opening having a constant diameter. See Figs. 1 and 2. Therefore, it would have been obvious to one skilled in the art to incorporate a stripper opening having a constant diameter as taught by Liander to the punch device of Cotter for better guiding the operative portion since there is more contacting area between the stripper opening and the operative portion.

Regarding claims 10 and 19, see Fig. 2.

Regarding claim 11, the upper portion of the punching portion is unguided in the transverse direction in a ready state as shown in Fig. 2.

Regarding claim 12, the die guide device 40 having a bush 90 with a passage is best seen in Fig. 3.

Regarding claim 13, see Figs. 2 and 3.

Regarding claim 14 and 15, as the die is moved downwardly a distance equal to the length of the punching portion 26, the punching portion makes a hole on the work piece 16. Therefore, the length of the punching portion is considered to be equal to the length of the stroke of the drive mechanism. See Fig. 2.

Regarding claim 16, it appears that the length of the operative portion is greater than the stroke of the drive mechanism. See Fig. 2-4.

Regarding claims 17 and 20, see Fig. 2.

Regarding claim 18, Cotter teaches a tool for punching a sheet like substrate comprising:

a lower tool part having a flat receiving face for a substrate 16;

an upper tool part including a die having a shaft 34, a graduated operative portion including a first part 28 and a second punching part 26, a linear guide 40, a stripper bush 93' and a drive mechanism (14,10). See Figs. 2-4.

Cotter does not teach the stripper bush having a constant diameter. Liander teaches a stripper bush having a constant diameter. See Figs. 1 and 2. Therefore, it would have been obvious to one skilled in the art to incorporate a stripper bush having a constant diameter as taught by Liander to the punch device of Cotter for better guiding the operative portion since there is more contacting area between the stripper bush and the operative portion.

***Allowable Subject Matter***

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3. Claims 1-8 are allowed.
4. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments, see the Remark, filed 08/18/2006, with respect to claims 1-8 have been fully considered and are persuasive. The rejection of claims 1-8 has been withdrawn.
6. Applicant's arguments filed 08/18/2006 with respect to claims 9 and 18 have been fully considered but they are not persuasive.

The Applicant argues that it is not clear where in the Cotter's punching device the constant diameter stripper opening would be located. The location of device the constant diameter stripper opening will be explained in the following paragraph.

Liander teaches the punch head 18 and the punch head support (the lower end of element 16) of the punch head being guided in a constant diameter stripper opening. Cotter teaches the punch head 26 and the punch head support 28 being guided in a non-constant diameter stripper opening 93'. In order to make the diameter of the stripper opening 93' constant, the upper diameter of the stripper opening 93' extends down to the bottom surface of the stripper opening 93'. See the below sketch.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phong H. Nguyen whose telephone number is 571-272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

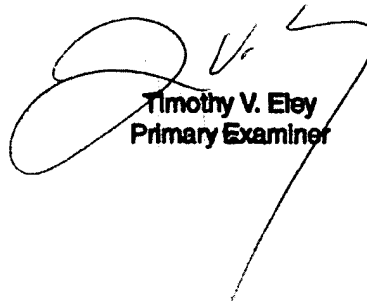
Application/Control Number: 10/753,874  
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PN:

A handwritten signature in black ink, appearing to be 'm' or 'mu'.

April 1, 2007

A large, stylized handwritten signature in black ink, possibly reading 'V. Eley'.

**Timothy V. Eley**  
**Primary Examiner**